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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/570,764

08/22/2006

Jens Laurvig Haugaard

50906

4917

1609 7590 07/02/2009

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.

1300 19TH STREET, N.W.

SUITE 600

WASHINGTON,, DC 20036

EXAMINER

FOX, JOHN C

ART UNIT

PAPER NUMBER

3753

MAIL DATE

DELIVERY MODE

07/02/2009

PAPER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/570,764  
Filing Date: August 22, 2006  
Appellant(s): HAUGAARD, JENS LAURVIG

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Mark Bicks  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 10, 2009 appealing from the Office action mailed September 12, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct, as regards independent claim 9. However, further explanation is warranted. Claim 10 recites that at least one of the dummy components can be "blocking a respective fluid-conducting path of at least one connecting line of the first and second groups". This is shown in Figure 4 where a dummy component 18/30 is blocking connecting line 14a (labeled in Figure 1). In this claimed embodiment neither line 14a nor the rightmost line 12 (labeled in Figure 1) has an actual flow connection to line 16 (labeled in Figure 1). Line 16 corresponds to the "one point" recited in claim 9, line 4. In Figure 4 there is no actual flow connection between line 14a and either of lines 14b. The only actual flow

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connection in Figure 4 that is recited in the claims is between the first group and the second group.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,080,983

Stumpmeier

3-1978

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stumpmeier.

Stumpmeier shows a modular valve manifold 1 with a first group of connecting lines 8 and a second group of connecting lines F, T, A, P, B. The manifold is for mounting supply and exhaust valves 5 on the top surface, see Figure 2, and includes the usual fluid connections for lines F, T, A, P, B, such as 3/4 for lines T/P, respectively, shown in Figure 1, and fluid connections 14, 15, 16 for the connecting lines 8. The manifold 1 can be joined to other manifolds to create a composite manifold for as many valves 5 as desired, see Figures 17-20. All of the lines F, T, A, P, B of the second group connect to a common point at the most remote, or indeed any, of the lines 8 of the first group. All of the bores 8 include five dummy components selected from the

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different modules shown in Figures 8-16, so a manifold for eight valves 5, for example, would include 40 dummy components.

Stumpmeier teaches a construction kit for providing different flow paths through the manifold by using different modules. The modules provide for flow communication between the two groups of lines and include check valves, which are read as return valves, and 2/2 way valves, which are read as switching valves. Figures 3 and 5 of Stumpmeier show one specific embodiment, where a module 22 connects line A to line 8 and another module 22 connects line P to line 8. All of the modules in Figures 10-13 would make a flow connection between the connecting lines of the first group and the connecting lines of the second group, and would simultaneously make a flow connection between connecting lines of the second group, similar to Figures 3 and 5, if used with another module of Figures 10-13. Stumpmeier clearly suggests the use of all of the modules in Figures 8-16 in a composite manifold for as many valves 5 as are desired.

A manifold which uses a plurality of modules shown in Figures 10-13 and which readily results in the bare number of actual flow connections recited in the claims is obvious for one of ordinary skill in the art.

The choice of a tank having a specified capacity to serve a particular installation is an obvious matter of design choice.

In the alternative, the claims are interpreted to mean that a dummy component can potentially produce the flow paths recited, since that is the only interpretation

consistent with Figure 4 of the application and claim 10. The modules of Stumpmeier in Figures 10-13 clearly have the potential to produce the claimed flow paths.

#### **(10) Response to Argument**

In section B of the Argument, lines 2-3, Appellant states that in Stumpmeier "Transverse bores 8 are provided for receiving distributor modules of different types" and then in line 5 argues against Stumpmeier for "none of the valves to be located in the holes...". The disparity in language makes it difficult to understand the exact argument. The object clause of the argument in lines 5-8, as far as the argument is understood, is clearly erroneous as regards the modules in lines 8, as set forth above.

Appellant argues that in the schematics of Stumpmeier the dot indicates that the flow paths intersect. The Examiner agrees with this argument.

Appellant argues that neither Figure 11 nor any other connection in Stumpmeier provide fluid communication between channels F, T, A, P, B. However, column 2, lines 45-46 of the reference discloses that channels F, T, A, P, B "can be optionally interconnected (or blocked) by distributor modules" (emphasis added). This is an explicit disclosure of the cited feature.

Appellant argues that the lines connecting to the valves 5 have been interpreted as the connecting lines of the first group. This is incorrect. The connecting lines of the first group are set forth above. Valves 5 are read as additional components attached to an external side of manifold 1, as recited in claims 11 and 12. It is possible to treat valves 5 as dummy components and it is likely they would meet the claims if so treated, but there is no need to consider it in view of the modules disclosed.

Appellant argues that there is nothing in Stumpmeier to suggest the claimed invention would be obvious. The Examiner disagrees. The essence of Stumpmeier is to be able to modify a fluid circuit by interchanging the different modules in lines 8. There are innumerable different circuits that can be created with the apparatus disclosed by Stumpmeier but only one specific example is shown in Figures 3 and 5. Since several of the disclosed modules are explicitly for making flow connections between the two groups of connecting lines the obviousness of the claimed circuit is suggested by the reference itself.

Moreover, the claims are directed to a specific circuit that can be potentially created. The potential to create that circuit is obviously encompassed by the components of Stumpmeier that are disclosed for that purpose.

In response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, the express purpose of the reference is a proper suggestion of obviousness.

As to dependent claims 10-21, Appellant makes the *pro forma* argument that nothing in these claims is disclosed in or obvious from Stumpmeier. Some of the

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dependent claims have been specifically addressed previously and Appellant's argument fails to rebut the rejections. In other dependent claims it is readily apparent how Stumpmeier meets the claims. The rejections comply with the requirements of 37 CFR §1.104 (c) (2) and Appellant's argument fails to show that the rejections are in error. All of the dependent claims are believed to be fairly disclosed in or obvious over Stumpmeier.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/John Fox/

Primary Examiner, Art Unit 3753

Conferees:

/Robin O. Evans/  
Supervisory Patent Examiner, Art Unit 3753

/Janet C. Baxter/  
TC 3700 TQAS